No.



7900040

THE UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Speight Seed Farms, Inc.

TUlierens, There has been presented to the

родо чено чено цан ис. ч. ч. т. под чени в цан и че

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF ASVENTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXTIDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, APORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT OF THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT.

INITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOBACCO

'Speight G-52'

In Testimony Winevest, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington

Allest.

Commissioner Plant Variety Protection Office

Agricultural Marketing Geroico

is 11th day of Moreh in Typewr of our Lord one thousand nine named and eighty.

Secretary of Agriculture

UNITED STATES DEPARTME AGRICULTURAL MARK LIVESTOCK, POULTRY, GRA APPLICATION FOR PLANT VARIE	ETING SERVICE IN & SEED DIVISION		FORM APPROVED OMB NO. 40-R3822
INSTRUCTIONS: See Reverse. 1a. TEMPORARY DESIGNATION OF		has been received (5	
VARIETY	1b. VARIETY NAME	PV NUMBER	AL USE ONLY
SPEIGHT G-52	SPEIGHT G-52	790004	0
2. KIND NAME Flu-cured Tobacco	3. GENUS AND SPECIES NAME	1-25-79	TIME 4:00 P.M.
4. FAMILY NAME (BOTANICAL)	Nicotiana Tobacum	FEE RECEIVED	DATE
Solanaceal-Night Shade	5. DATE OF DETERMINATION December 1977	\$ 250.00	1-25-79
6. NAME OF APPLICANT(S)	7. ADDRESS (Street and No. or R.F.D. No.,	City, State, and ZIP	8. TELEPHONE AREA
Speight Seed Farms, Inc	Code) RFD 1 P. O. Box 50 Winterville, NC	• / ·	CODE AND NUMBER (919) 756-0718
9. IF THE NAMED APPLICANT IS NOT A PE ORGANIZATION: (Corporation, partnersh	RSON, FORM OF 10. IF INCORPORAT DATE OF INCOR	ED, GIVE STATE AND	11. DATE OF INCOR-
Corporation	North Card	olina	1-1-72
12. NAME AND MAILING ADDRESS OF APP	LICANT REPRESENTATIVE(S), IF ANY, TO	SERVE IN THIS APPLIC	ATION AND RECEIVE
	l Farms, Inc. 07, Winterville, NC 285	90	
		ra Cal Di are e	7
· ·	ding History of the Variety (See Section 3	2 of the Plant Variety	y Protection Act.)
X 13B. Exhibit B, Novelty Statem	ent.		
🛛 13C. Exhibit C, Objective Descr	iption of the Variety (Request form from	Plant Variety Protect	ion Office.)
X 13D. Exhibit D, Additional Desc	cription of the Variety.		
14a. DOES THE APPLICANT(S) SPECIFY THAT SEED? (See Section 83(a). (If "Yes," answer	er 14B and 14C below.) X YES	NO	
14b. DOES THE APPLICANT(S) SPECIFY THAT LIMITED AS TO NUMBER OF GENERATIONS		B, HOW MANY GENER. BREEDER SEED?	ATIONS OF PRODUC-
X YES NO	FOUNDATION	X REGISTERED	X CERTIFIED
15a. DID THE APPLICANT(S) FILE FOR PROT name of countries and dates.)	ECTION OF THIS VARIETY IN OTHER COU	NTRIES? YES	NO (If "Yes," give
•		William Control	
15b. HAVE RIGHTS BEEN GRANTED THIS VA and dates.)	RIETY IN OTHER COUNTRIES? YES	NO (If "Yes,"	give name of countries
		8.	·
	· · · · · · · · · · · · · · · · · · ·		
JOURNAL? X YES	PUBLICATION OF HIS/HER (THEIR) NAM		
17. The applicant(s) declare(s) that a viable replenished upon request in accordance	e sample of basic seed of this variety will be with such regulations as may be applicab	e furnished with the a le.	application and will be
The undersigned applicant(s) is (are) the variety is distinct, uniform, and stable at 42 of the Plant Variety Act.	e owner(s) of this sexually reproduced no as required in Section 41, and is entitled to	vel plant variety, and p protection under the	believe(s) that the e provisions of Section
Applicant(s) is (are) informed that false	representation herein can jeopardize pro	tection and result in p	enalties.
December 15, 1978	mak I	I Franklees	- Bruder
(DATE)	" Jeff word". T.	SIGNATURE OF APPLI	CANT)
	0111		
(DATE)	paint &	SIGNATURE OF APPLI	CANT)
FORM GR-470 (1-78)	•		

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties:

 (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



SPEIGHT SEED FARMS, INC.

7900040

BREEDERS, REGISTERED AND CERTIFIED SEED

TOBACCO SEED - SOYBEANS - HYBRID CORN

BOX 507 ● PHONE (919) 756-0718

WINTERVILLE, N. C. 28590

December 5, 1978

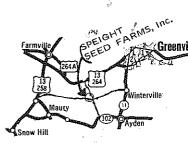
12 A

Exhibit A

Origin & Breeding History of Speight G-52

- 1. Speight G-52 originated from a cross between Speight G-28 and Speight G-131. Speight G-131 was from a cross between NC 95 and Oxford 1-181.
- 2. This cross was made in the summer of 1968 and was grown out as an F-1 in 1969. Results of this cross was named or numbered breeding line R-3.
- 3. Individual plant selections were made in our disease infested nurserys through the fifth generation; at this time, R-3 became stable.
- 4. Variants during this period were mostly two off types; one a narrow stringy, and the other a very large fan shaped leaf type with leaves growing upright.
- 5. The true type selected was similar to Speight G-28, low growing with wider leaf spacing, and more body.
- 6. The breeding line R-3 was then named Speight G-52 and entered in the North Carolina Official Variety Test in 1974.





Speight Seed Farms, Inc.

BREEDERS, REGISTERED AND CERTIFIED SEED

TOBACCO SEED - SOYBEANS - HYBRID CORN

BOX 507 PHONE (919) 756-0718

WINTERVILLE, N. C. 28590

June 11, 1979

Mr. Joseph J. Higgins
Examiner, Plant Variety
Protection Office
USDA, AMS
Livestock, Poultry, Grain and Seed Division
National Agricultural Library Building
Beltsville, MD 20705

Dear Mr. Higgins,

Subject: Tobacco Application No. 7900040, "Speight G-52"

Your letter dated February 28, 1979 refers. Would you please insert "yes" to 13A.

Regarding Exhibit A, no specific variants have been found in this variety. The morphological appearance and agronomic performance remained stable from the F5 to F9 generations i.e. from 1974 to 1978. In regards to the novelty statement and particulars of trial performance we wish to amend Exhibits B and D with the enclosed information.

I hope these amendments will answer the queries raised by your letter.

Mark Drimsly

Mark Grimsley

MG/dn



Farmville SPEIGHT ARMS MC.

Greenville SPEIGHT ARMS Greenville Winterville Ayden

Snow Hill

12 B (now 13B) Exhibit B

Novelty Statement of Speight G-52

Name: Speight G-52

Pedigree: Speight G-28 x Speight G-131

1. Speight G-52 most closely resembles Speight G-28. It reaches flowering at about the same time (65 days¹). However, it carries fewer leaves (18.3 vs. 19.0¹) on a similarly sized stalk (39 inches¹) and consequently the internodes are slightly wider spaced (2.15 inches vs. 2.06 inches¹). The difference in leaf number is significant in some years and in some localities. For example, in 1978, the average leaf numbers for five locations in the NC Official Variety Test were as follows:

<u>Variety</u>	Leaf per Plant		
Speight G-52	20.0		
Speight G-28	21.4		
L. S. D. (0.05)	1.0		

Speight G-52 generally yields more saleable leaf, than Speight G-28 (2870 vs. 2768 lb/acre¹), its nicotine concentration is always higher (3.51% vs. $2.92\%^1$) and it is susceptible to rootknot nematode while Speight G-28 is resistant.

¹Data taken from the average for the 1974, 1975, 1977, and 1978 NC Official Variety Tests, each based on five locations. (G-52 was not tested in the NC Official Variety Test in 1976, but was tested in the Regional Small Plot and Regional Farm Test in 1977). G-28 was not compared in the Regional Test. I will attach this information.

In the 1975, NC Official Variety Test, averaged over five locations, Speight G-52 yielded significantly more than ${\tt S}$ Speight G-28.

<u>Variety</u>	Yield, 1b/acre
Speight G-52	3116
Speight G-28	2825
L. S. D. (0.05)	235

In the same trials for 1975, 1977, and 1978 Speight G-52 had significantly higher concentrations of nicotine than Speight G-28.

<u> </u>	Nicotine %		
Variety Speight G-52 Speight G-28	$\frac{1975}{3.76}$ 2.99	$\frac{1977}{4.14}$ 3.57	$\frac{1978}{3.28}$ 2.54
L. S. D. (0.01)	0.43	0.46	0.37

FORM GR-470-31 (12-16-74)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE

OBJECTIVE DESCRIPTION OF VARIETY

Tobacco (Nicotiana tabacum)	VARIETY NAME OR TEMPORARY
NAME OF APPLICANT(8)	DESIGNATION
Speight Seed Farms, Inc.	SPEIGHT G-52
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)	FOR OFFICIAL USE ONLY
Box 507	PVPO NUMBER
Winterville, NC 28590	7900040
in the horse below.	
Place the appropriate number that describes the varietal character in the boxes below. Place a zero in first box (e.g. 089 or 09 when number is either 99 or less o	r 9 or less.
. CLASS	- CIGAR BINDER 6 - CIGAR WRAPF
1 = FLUE-CURED 2 = FIRE-CURED 3 = AIR-CURED 4 = CIGAR FILLEN 0	FOREIGN-NON-CIGAR LEAF
7 = MISCELLANEOUS-DOMESTIC 8 = FOREIGN-CIGAR LEAF	
AIR-CURED: 1 = BURLEY 2 = MARYLAND 3 = DARK AIR-CURI	ED
STANDARD VARIETIES	
01 = NC 95	G-28 06 = SC 58
07 = Ky 151 08 = BURLEY 21 09 = BURLEY 49 10 = Ky 10 11 = MARYLA	ND 609 12 = Ky 165
13 = Pennbel 69 14 = HAVANA 503 15 = FLORIDA 17 16 = OTHER	
2. MATURITY (Transplant to 50% plants 1 Fl.) (Select code from Standard Varieties listed above)	
	THAN 0 5
0 6 3 NO. OF DAYS	· · · · · · · · · · · · · · · · · · ·
0 0 DAYS LATER TE	1AN 0 5
3. SEEDING TO TRANSPLANTING (Select code from Standard Varieties listed above)	
7 6 NO. OF DAYS 0 4 DAYS EARLIER	THAN 0 5
DAYS LATER TO	HAN
	<u> </u>
4. PLANT HEIGHT (After topping) (Select code from Standard Varieties listed above)	
1 1 6 CM TALL CM SHORTER T	HAN
	··· 0 [6]
0 2 CM TALLER TH	AN0 5
5. LEAF SIZE (At leaf maturity) (Select code from Standard Varieties listed above)	
5 0 3 CM 5TH LEAF 5 5 5 CM 10TH LEAF	5 5 4 CM 15TH LEAF
2 3 CM SHORTER THAN 0 5 5 5 CM SHORTER THAN 0 5	3 6 CM SHORTER THAN 0
	CM LONGER THAN
	<u> </u>
WIDTH	2 7 /L CM 15TH LEAF
2 4 4 cm 5TH LEAF	
4 6 CM NARROWER THAN 0 5 3 0 CM NARROWER THAN 0 5	46 CM NARROWER THAN 0
CM WIDER THAN	CM WIDER THAN
Constant Variation Listed shows	
6. LEAF YIELD (Select code from Standard Varieties listed above)	% MORE THAN
2 7 4 0 KG/HA % LESS THAN 0 4	6

					SPEI	G/7 /
,	•		•	7900	1040 (6-5
FORM GR-470	31 (page 2)		<u> </u>		·	
GROUPING:			STANDARD VAR			
01 = NC 95	02 = NC 2326	03 = COKER 319	04 = HICKS	05 = SPEIGHT G-28	06 = SC 58	
07 = Ky 151	08 = BURLEY 21	09 = BURLEY 49	10 = Ky 10	11 = MARYLAND 609	12 = Ky 165	
13 = Pennbel 69		15 = FLORIDA 17	16 = OTHER _			
7. LEAF NUM	BER (Select code from St.	andard Varieties listed ab	ove)	•		
TOPPED NO	NO. PER PLANT	179			•	
2 4 0	NO. OF LEAVES >	0.6 CM	1 1	5 CM HEIGHT OF LAS	T LEAF > 40.6 C	:M
NOT TOPPE	D: 9 912- 10/24/79 NO. OF LEAVES OR NO.	DDES TO "CROWFOOD"	FROM 1ST HARV	S ESTABLE LEAF		
2 7010	((· · · · · · · · · · · · · · · · · · ·	
8. INTERNODI	ES (Topped) (Select code	from Standard Varieties I	isted above)			
6 0 мі	M LENGTH	MM SHORTER	THAN	0 4 MM LON	IGER THAN	· 0
9. LEAF CHAR						
PETIOLEA	NGLE:	7	•			
3 0 0	EGREES	GROUPING: 1-			4 = > 65°	
LEAF CARE	RIAGE		LEAF CO	LOR (At topping or when 50	光 of plants with 1 flow	/er)
1 4 1	RCHED (DROOPING) PRIGHT	2 = HORIZONTAL	- 191	 LIGHT GREEN 2 = GRE YELLOW-GREEN 5 	EN 3 = DARK = YELLOW '	GREEN
		O- LENGTH FOLIALS	WIDTH C			_
131	NOADER THAN LONG	2 = LENGTH EQUALS	111	BROADEST AT MIDDLE ABOVE MIDDLE	2 * BELOW MIDDLE	=
TIP SHAPE	• .		VENATI	ON PATTERN:		
22 1 = AC	CUTE 2 = ACUMI	NATE 3 = OBTUSE	2 1	SQUARE 2 = ANG	ULAR	
LEAF SURF	ACE		LEAF M	ARGIN		
3 1-SI	моотн (ніскѕ)	2 = PUCKERED (NO	2 95) 1 .	= WAVY 2 = NOT WAVY	1 = RECURVE 2 = NOT REC	
10. FLOWERS:			FLOWER	HEAD HABIT:		
2 COLO		= PINK = OTHER	121	CLOSED (NC 95) OPEN (HICKS)	2 = INTERMEDIAT	re 、
11. PLANT FO	RM				<u></u>	
2 1 = PY	/RAMIDAL 2 = 0	COLUMNAR 3 =	OTHER (Specify)			
12. GROUND S	UCKERS:	· · · · · · · · · · · · · · · · · · ·				
0 6 NO. P	ER PLANT					
13. DISEASE (C	D = Not tested, 1 = Suscep	tible, 2 = Resistant)				
2 BLAC	K SHANK (RACES)	1 + 0	2 FL	SARIUM WILT (NICOTIANA	N)	
	к яоот вот		2 F	JSARIUM WILT (BATATAS)		
BLUE	MOLD		O FF	ROGEYE		

Tolerentown spot

BACTERIAL WILT

WILDFIRE (SPECIES)_

BLACKFIRE

FORM GR-470-31 (page 3)			1000040	9-57
33. DISEASE (O = Not tested, 1 = Susa	ceptible, 2 = Resistant)		·.	
0 POTATO VIRUS Y		1 TMV		
NEMATODE ROOT ROT (L	ESION, SPECIES)	1 ROOT KNOT NEMATODE		
0 TOBACCO ETCH VIRUS		0 OZONE AIR POLLUTION		
OTHER (Specify)		OTHER (Specify)	And the second s	Section 1995 and the section of the
		rd variety appropriate for each disease t	tested and indicate it	disease reaction of
VARIETY NICOTINE	data for described and standard variety NOR NICOTINE	TOTAL NITROGE	N F	EDUCING SUGARS
SUBMITTED 28 7	2 8	2 3 5		% (FLUE-CURED) 15 6 1
STANDARD 2 5 8	18	2 2 1		1 7 9 4
NAME OF STANDARD VARIETY	· · · · · · · · · · · · · · · · · · ·			
15. VARIETIES MOST CLOSELY	RESEMBLING THAT DESCRIBED F			
СНАВАСТЕЯ	VARIETY	CHARACTER		ARIETY
YTIRUTAM	G-28	LEAF TIP SHAPE	NC 232	26
LEAF LENGTH	NC 95	VENATION PATTERN	G-28	
LEAF WIDTH	NC 2326	LEAF SURFACE	NC 95	
LEAF CARRIAGE	G-28	LEAF MARGIN	G-28	

LEAF SHAPE G-28
16. COMMENTS (For increasing accuracy of description)

G-28

G-28

LEAF CARRIAGE

PETIOLE ANGLE

Speight G-52 most closely resembles Speights G-28 but differs by producing shorter and narrower leaves with wider spaced internodes. Ground sucker counts are higher and leaves on G-52 carry heavier body with higher yields. Nicotine content is always higher than G-28. Seed heads are more open and G-52 is susceptible to Root Knot Nemotodes with Speight G-28 being Resistant.

LEAF COLOR

PLANT FORM

G-28

G-28

L. C. SPEIGHT

RACHEL SPEIGHT

SPEIGHT SEED FARMS, INC.

BREEDERS, REGISTERED AND CERTIFIED SEED TOBACCO SEED - SOYBEANS - HYBRID CORN BOX 507 @ PHONE (919) 756-0718 WINTERVILLE, N. C. 28590

December 5, 1978

12-E

Exhibit - E

Statement of the Basis of Applicants Ownership

Name: Speight G-52

Speight G-28 x Speight G-131 Pedigree:

Release: December 1977

Owner: Speight Seed Farms

M. L. Grimsley, The Breeder, is an employee of Speight Seed Farms, Inc.



